

TAHITI ISLAND/FAAA PF

Latitude = 17.50 S

WMO No. 919380

Longitude = 149.60 W

Elevation = 7 feet

Period of Record = 1973 to 1996

Average Pressure = 29.86 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	91	80	136	7.1	W
0.4% Occurrence	90	79	135	7.7	W
1.0% Occurrence	89	79	133	8.4	W
2.0% Occurrence	88	78	132	8.6	NE
Mean Daily Range	11	-	-	-	-
97.5% Occurrence	70	67	92	4.1	E
99.0% Occurrence	68	65	85	4.0	E
99.6% Occurrence	67	64	83	4.0	E
Median of Extreme Lows	64	60	71	4.6	E
Wet Bulb Temperature (T_{wb})	(°F)	Mean Coincident (Average) Values			
Median of Extreme Highs	82	88	151	7.7	W
0.4% Occurrence	81	87	145	8.3	NNE
1.0% Occurrence	80	87	140	8.5	NNE
2.0% Occurrence	79	85	137	8.5	NNE
Humidity Ratio (HR)	(gr/lb)	Mean Coincident (Average) Values			
Median of Extreme Highs	158	87	1.05	7.4	W
0.4% Occurrence	150	85	0.99	9.0	NNE
1.0% Occurrence	144	85	0.96	9.4	NNE
2.0% Occurrence	141	84	0.94	8.9	NNE
Air Conditioning/		T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
Humid Area Criteria	# of Hours	0	3981	5864	8395

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
10	N/A	N/A	7.0 + 3.4
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
81.6	N/A	N/A	0

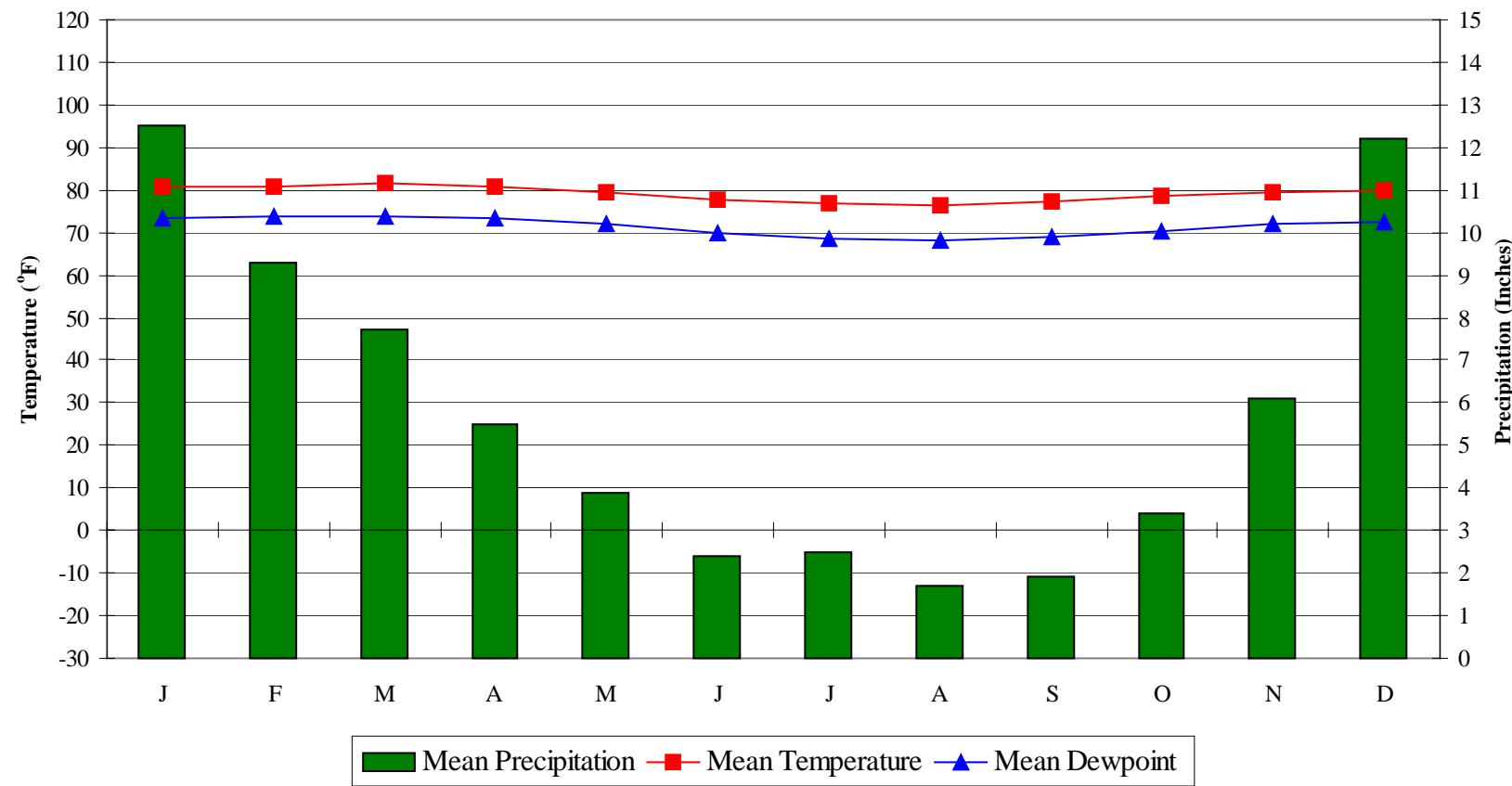
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

TAHITI ISLAND/FAAA

PF

WMO No. 919380

Average Annual Climate

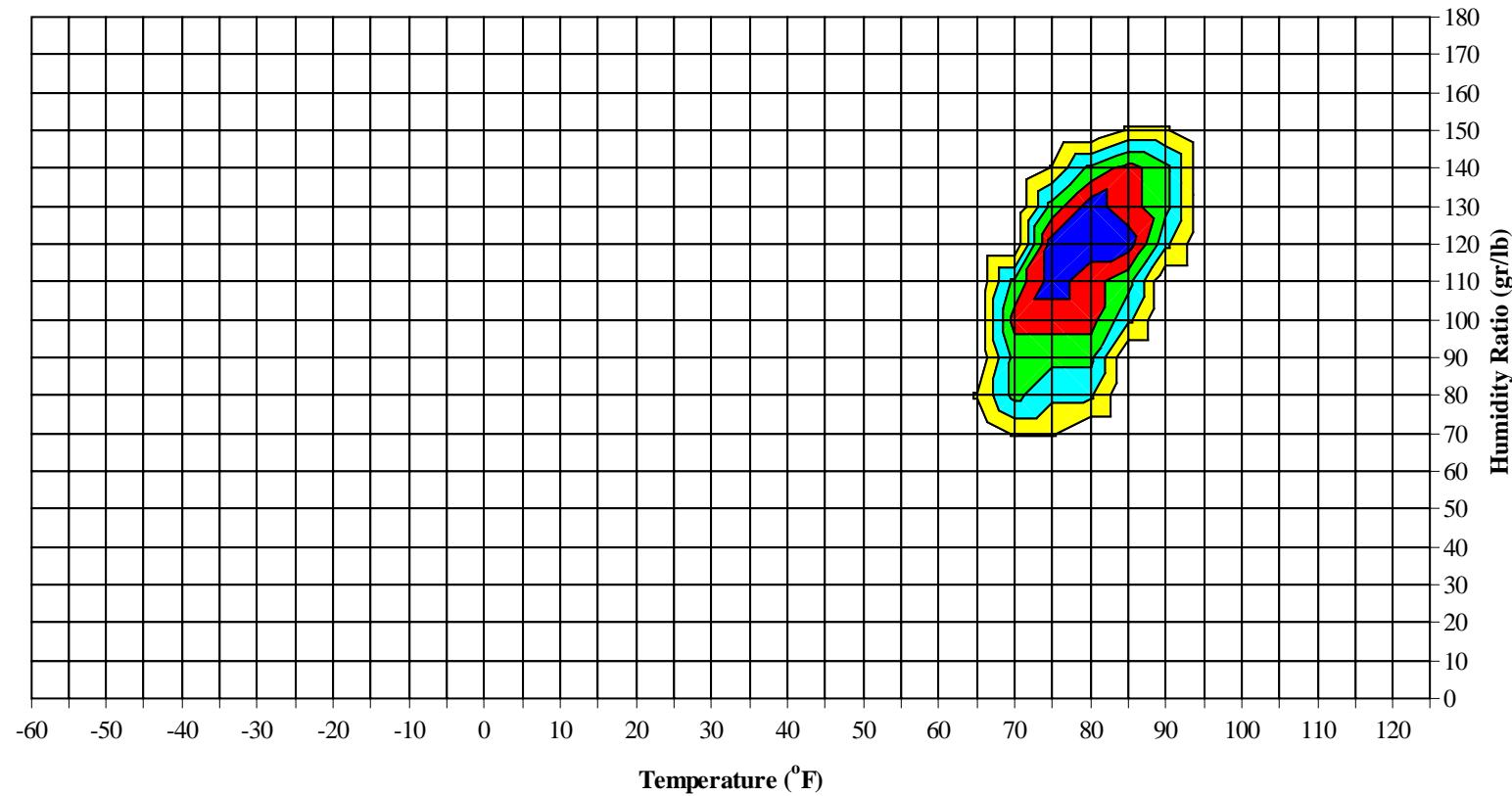


TAHITI ISLAND/FAAA

PF

WMO No. 919380

Long Term Psychrometric Summary



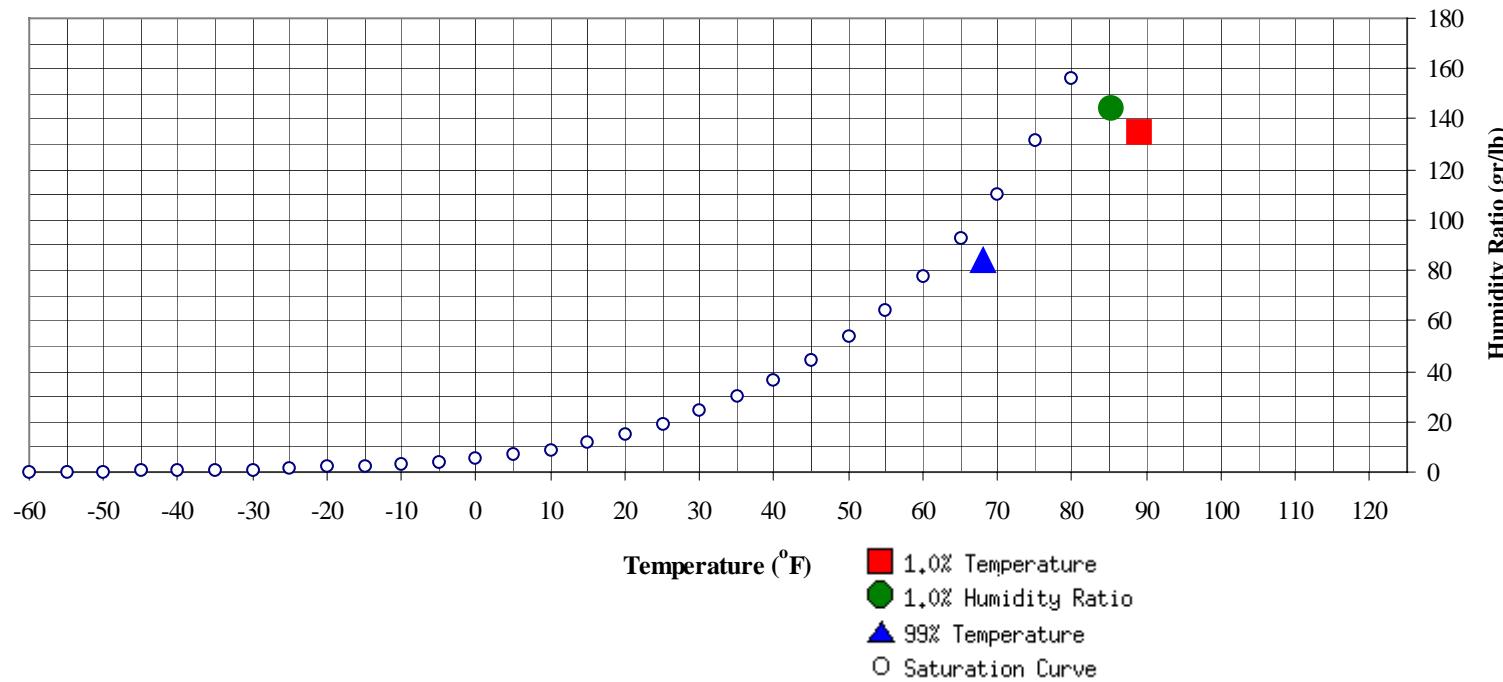
- 50% of all observations
- 80% of all observations
- 95% of all observations
- 97.5% of all observations
- 99% of all observations

TAHITI ISLAND/FAAA

PF

WMO No. 919380

Psychrometric Summary of Peak Design Values



	MCHR (°F)	Enthalpy (btu/lb)	1.0% Humidity Ratio	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
99% Dry Bulb	68	84.3	29.5	144.2	85.2	79.5	43.1

	MCHR (°F)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	89	79.1	42.6

TAHITI ISLAND/FAAA PF

WMO No. 919380

Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January						February						March					
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)			
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00					
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00					
90 / 94	7	0	7	79.5		11	1	12	79.0		22	2	24	80.0				
85 / 89	5	142	32	180	77.9	4	130	33	166	78.1	4	163	41	208	78.5			
80 / 84	71	78	117	266	75.9	63	60	100	222	76.3	76	49	121	246	76.3			
75 / 79	148	19	93	261	73.8	142	22	87	250	74.0	152	12	82	246	74.1			
70 / 74	23	1	6	30	71.0	16	1	4	21	71.0	17	1	2	20	70.8			
65 / 69																		
60 / 64																		

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TAHITI ISLAND/FAAA PF

WMO No. 919380

Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April						May						June					
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)			
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00					
	08	16	00			08	16	00			08	16	00					
90 / 94	9	0	9	9	79.5	2	2	79.2	0	0	0	0	78.3					
85 / 89	1	158	26	185	78.1	120	5	125	77.3	55	0	55	76.5					
80 / 84	66	62	113	242	76.1	43	114	94	251	75.5	10	161	59	230	74.3			
75 / 79	149	11	97	257	73.8	141	11	134	285	73.2	101	23	130	253	72.2			
70 / 74	24	0	4	28	70.3	63	0	16	79	70.0	116	1	50	167	69.2			
65 / 69						1			1	65.1	13		2	15	64.5			
60 / 64											1		0	1	59.6			

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TAHITI ISLAND/FAAA PF

WMO No. 919380

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	July						August						September					
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)			
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00					
	To 08	To 16	To 00			To 08	To 16	To 00			To 08	To 16	To 00					
90 / 94	0	0	78.5															
85 / 89	25	25	75.9			18	0	18	75.7		23	2	25	75.9				
80 / 84	5	180	48	233	73.8	5	176	47	229	73.6	16	180	53	249	73.9			
75 / 79	88	40	124	252	71.5	88	50	119	257	71.2	95	35	132	262	71.5			
70 / 74	130	4	71	205	68.5	122	4	75	201	68.4	109	2	51	163	68.7			
65 / 69	24	0	6	29	64.0	30		7	37	63.9	19		2	21	64.4			
60 / 64	1	0	1	60.3		3		0	3	60.0	1			1	59.5			

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TAHITI ISLAND/FAAA PF

WMO No. 919380

Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	October						November						December						
	Hour Group (LST)			M C W B Total Obs (°F)	Hour Group (LST)			M C W B Total Obs (°F)	Hour Group (LST)			M C W B Total Obs (°F)							
	01 To 08	09 To 16	17 To 00		01 To 08	09 To 16	17 To 00		01 To 08	09 To 16	17 To 00		01 To 08	09 To 16	17 To 00	01 To 08	09 To 16	17 To 00	
	08	16	00		08	16	00		08	16	00		08	16	00	08	16	00	
90 / 94	0	0	0	77.0		1	1	78.9		1	0	1	78.7						
85 / 89	0	55	3	58	76.8	1	93	6	100	77.1	3	102	13	118	77.6				
80 / 84	44	169	78	292	74.6	60	123	94	276	75.3	63	111	103	276	75.7				
75 / 79	108	21	139	268	72.3	121	20	126	267	73.1	144	31	123	298	73.6				
70 / 74	89	2	27	119	69.6	58	2	15	75	70.3	38	2	9	50	71.0				
65 / 69	6		1	7	64.2	1			1	64.8									
60 / 64	0			0	60.0														

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TAHITI ISLAND/FAAA PF WMO No. 919380
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

Temperature Range (°F)	Annual Totals					
	Hour Group (LST)			Total Obs	M	C
	01 To 08	09 To 16	17 To 00		W	B
90 / 94		53	3	56	79.5	
85 / 89	17	1063	158	1238	77.7	
80 / 84	515	1480	1020	3015	75.1	
75 / 79	1473	301	1388	3161	72.9	
70 / 74	813	23	334	1170	69.2	
65 / 69	95	0	18	113	64.1	
60 / 64	6		0	6	60.0	

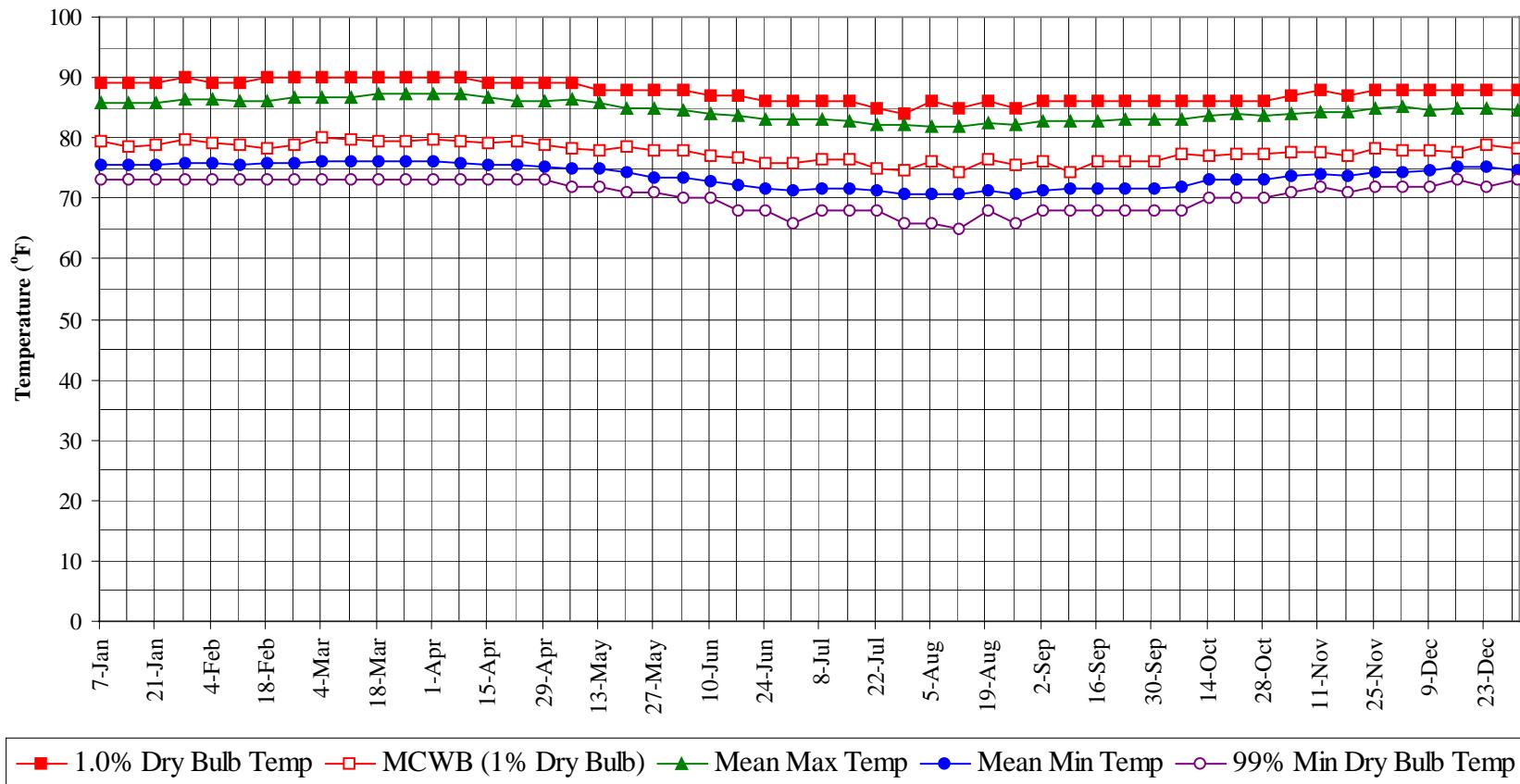
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

TAHITI ISLAND/FAAA

PF

WMO No. 919380

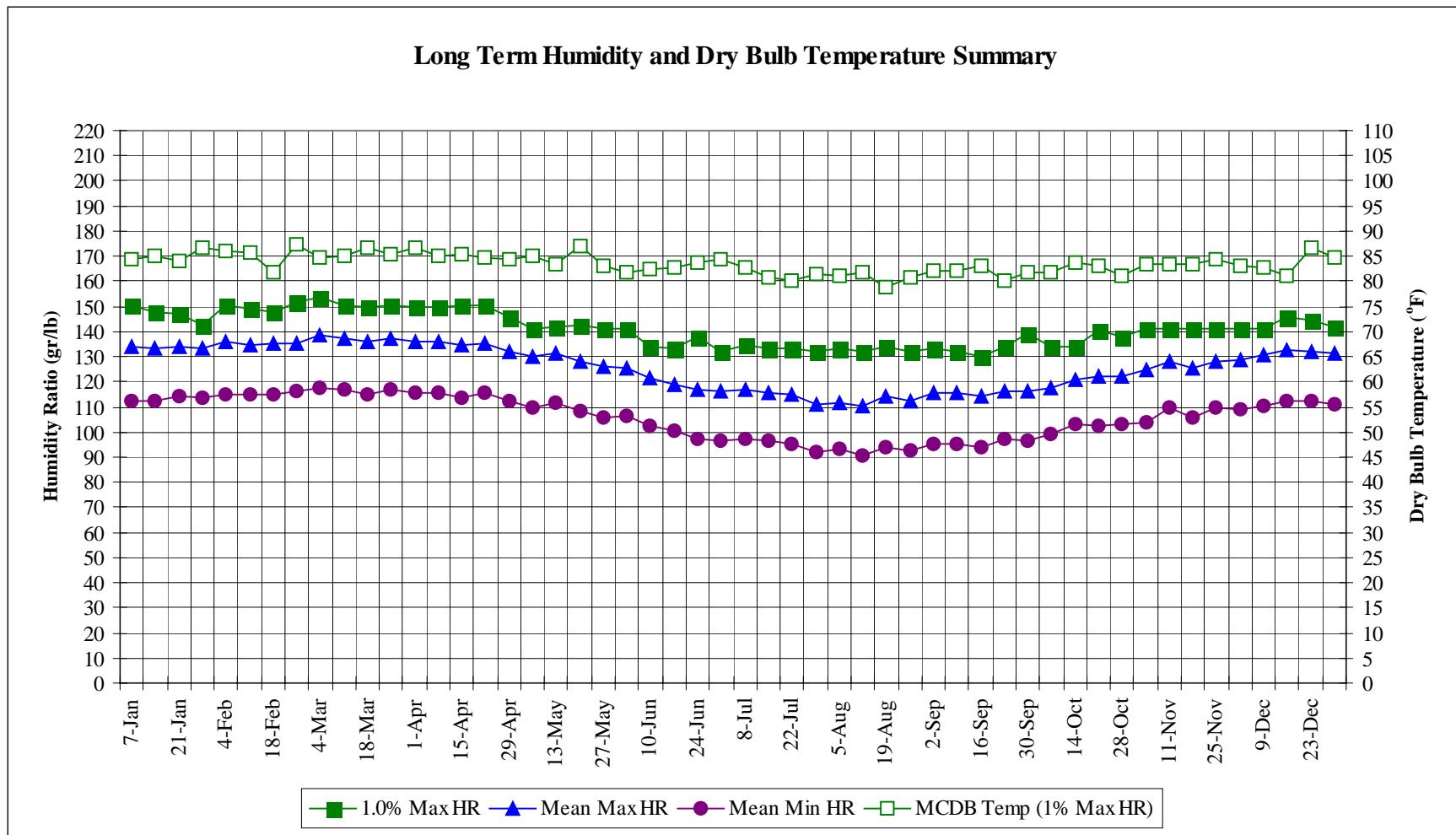
Annual Summary of Temperatures



TAHITI ISLAND/FAAA

PF

WMO No. 919380



TAHITI ISLAND/FAAA PF

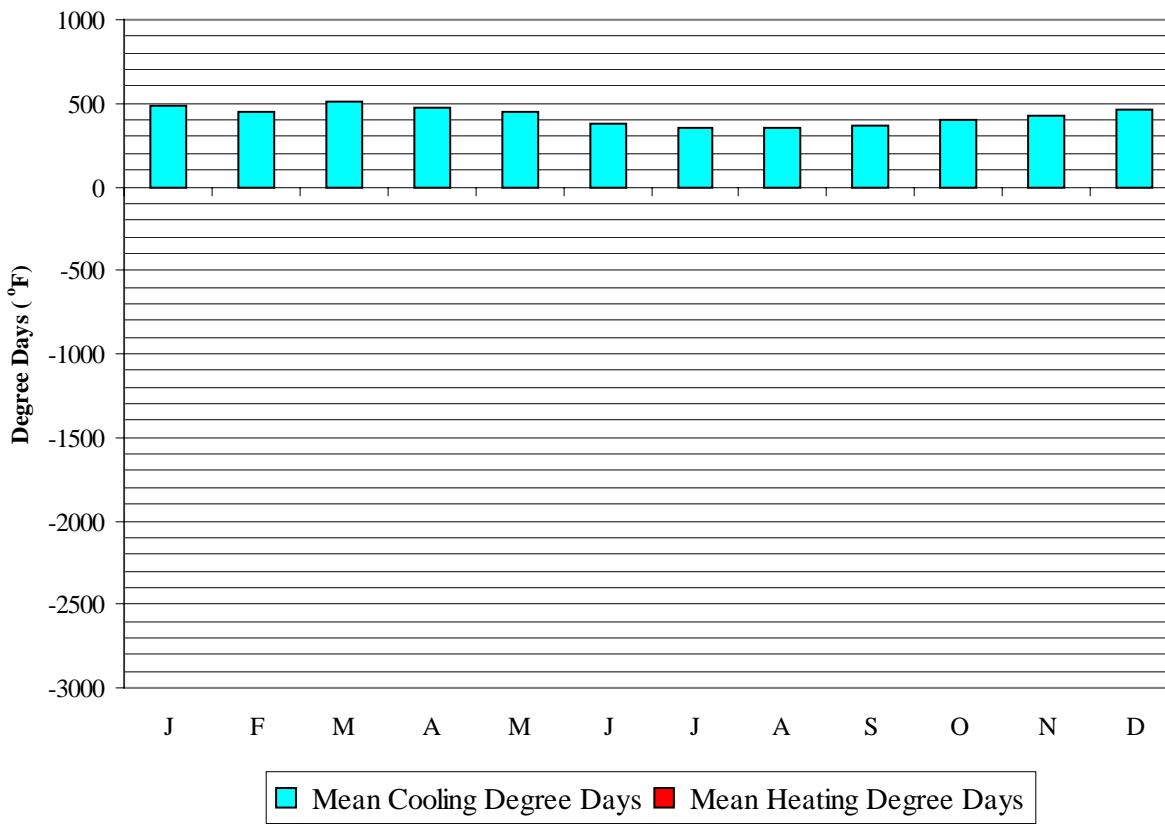
WMO No. 919380

Long Term Dry Bulb Temperature and Humidity Summary

Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	89.0	79.3	85.7	75.6	73.0	150.5	84.5	134.2	112.6
14-Jan	89.0	78.7	85.7	75.5	73.0	147.7	85.0	133.4	112.4
21-Jan	89.0	78.9	85.7	75.6	73.0	147.0	84.2	133.8	114.5
28-Jan	90.0	79.8	86.5	76.0	73.0	142.8	86.8	133.1	113.8
4-Feb	89.0	79.2	86.3	75.8	73.0	150.5	86.2	135.8	114.6
11-Feb	89.0	79.0	86.1	75.5	73.0	149.1	85.7	134.9	115.1
18-Feb	90.0	78.2	86.0	75.9	73.0	147.7	81.8	135.4	115.1
25-Feb	90.0	78.9	86.6	75.9	73.0	151.9	87.5	135.5	116.5
4-Mar	90.0	80.1	86.7	76.3	73.0	154.0	84.7	138.6	117.7
11-Mar	90.0	79.8	86.8	76.1	73.0	150.5	85.1	137.2	116.9
18-Mar	90.0	79.5	87.3	76.0	73.0	149.8	86.8	136.0	115.0
25-Mar	90.0	79.5	87.4	76.3	73.0	150.5	85.3	137.5	117.2
1-Apr	90.0	79.7	87.3	76.1	73.0	149.8	86.6	135.8	115.7
8-Apr	90.0	79.5	87.2	75.9	73.0	149.8	85.1	135.7	115.9
15-Apr	89.0	79.0	86.7	75.7	73.0	150.5	85.3	134.5	113.5
22-Apr	89.0	79.4	86.0	75.4	73.0	150.5	84.7	135.2	115.5
29-Apr	89.0	78.9	86.2	75.3	73.0	145.6	84.3	131.9	112.1
6-May	89.0	78.4	86.3	74.9	72.0	141.4	84.9	129.9	109.5
13-May	88.0	78.0	85.7	74.8	72.0	142.1	83.5	131.3	111.7
20-May	88.0	78.5	84.9	74.4	71.0	142.8	86.9	128.2	108.7
27-May	88.0	78.0	85.0	73.4	71.0	141.4	82.9	126.0	105.7
3-Jun	88.0	77.9	84.7	73.4	70.0	141.4	81.8	125.8	106.7
10-Jun	87.0	77.0	83.9	72.7	70.0	133.7	82.5	121.8	102.6
17-Jun	87.0	76.9	83.7	72.1	68.0	133.0	82.8	119.1	100.5
24-Jun	86.0	75.7	83.1	71.6	68.0	137.9	83.6	117.0	97.1
1-Jul	86.0	75.9	83.0	71.3	66.0	132.3	84.5	116.0	96.3
8-Jul	86.0	76.6	83.1	71.6	68.0	134.4	82.7	117.2	97.2
15-Jul	86.0	76.4	82.7	71.6	68.0	133.0	80.9	115.4	96.2
22-Jul	85.0	75.0	82.3	71.4	68.0	133.0	80.0	114.7	95.3
29-Jul	84.0	74.6	82.1	70.6	66.0	132.3	81.4	111.3	92.2
5-Aug	86.0	76.0	82.0	70.6	66.0	133.0	81.1	111.9	93.4
12-Aug	85.0	74.4	82.0	70.7	65.0	132.3	81.9	110.0	90.5
19-Aug	86.0	76.5	82.4	71.3	68.0	133.7	78.8	114.1	94.2
26-Aug	85.0	75.4	82.2	70.6	66.0	132.3	80.7	112.0	92.6
2-Sep	86.0	76.1	82.8	71.2	68.0	133.0	82.2	115.4	95.1
9-Sep	86.0	74.2	82.7	71.5	68.0	132.3	82.1	115.5	95.2
16-Sep	86.0	76.1	82.7	71.5	68.0	130.2	83.0	114.0	93.8
23-Sep	86.0	76.1	83.0	71.5	68.0	133.7	80.0	116.1	96.9
30-Sep	86.0	76.2	83.1	71.6	68.0	139.3	81.8	116.0	96.6
7-Oct	86.0	77.2	83.2	72.0	68.0	133.7	81.7	117.4	99.3
14-Oct	86.0	76.9	83.6	73.0	70.0	133.7	83.8	120.9	102.9
21-Oct	86.0	77.2	83.9	73.2	70.0	140.7	82.9	122.2	102.2
28-Oct	86.0	77.4	83.7	73.1	70.0	137.9	81.0	122.4	103.4
4-Nov	87.0	77.6	84.1	73.6	71.0	141.4	83.4	124.6	104.1
11-Nov	88.0	77.6	84.3	74.1	72.0	141.4	83.3	128.2	109.5
18-Nov	87.0	76.9	84.2	73.9	71.0	141.4	83.5	125.2	106.0
25-Nov	88.0	78.4	84.9	74.3	72.0	141.4	84.5	128.0	109.5
2-Dec	88.0	77.9	85.2	74.4	72.0	141.4	83.2	128.8	108.7
9-Dec	88.0	78.1	84.7	74.6	72.0	141.4	82.9	130.5	110.6
16-Dec	88.0	77.7	84.9	75.1	73.0	145.6	81.0	132.8	112.5
23-Dec	88.0	78.8	84.9	75.2	72.0	144.2	86.8	131.8	112.3
31-Dec	88.0	78.2	84.5	74.7	73.0	142.1	84.6	131.1	111.3

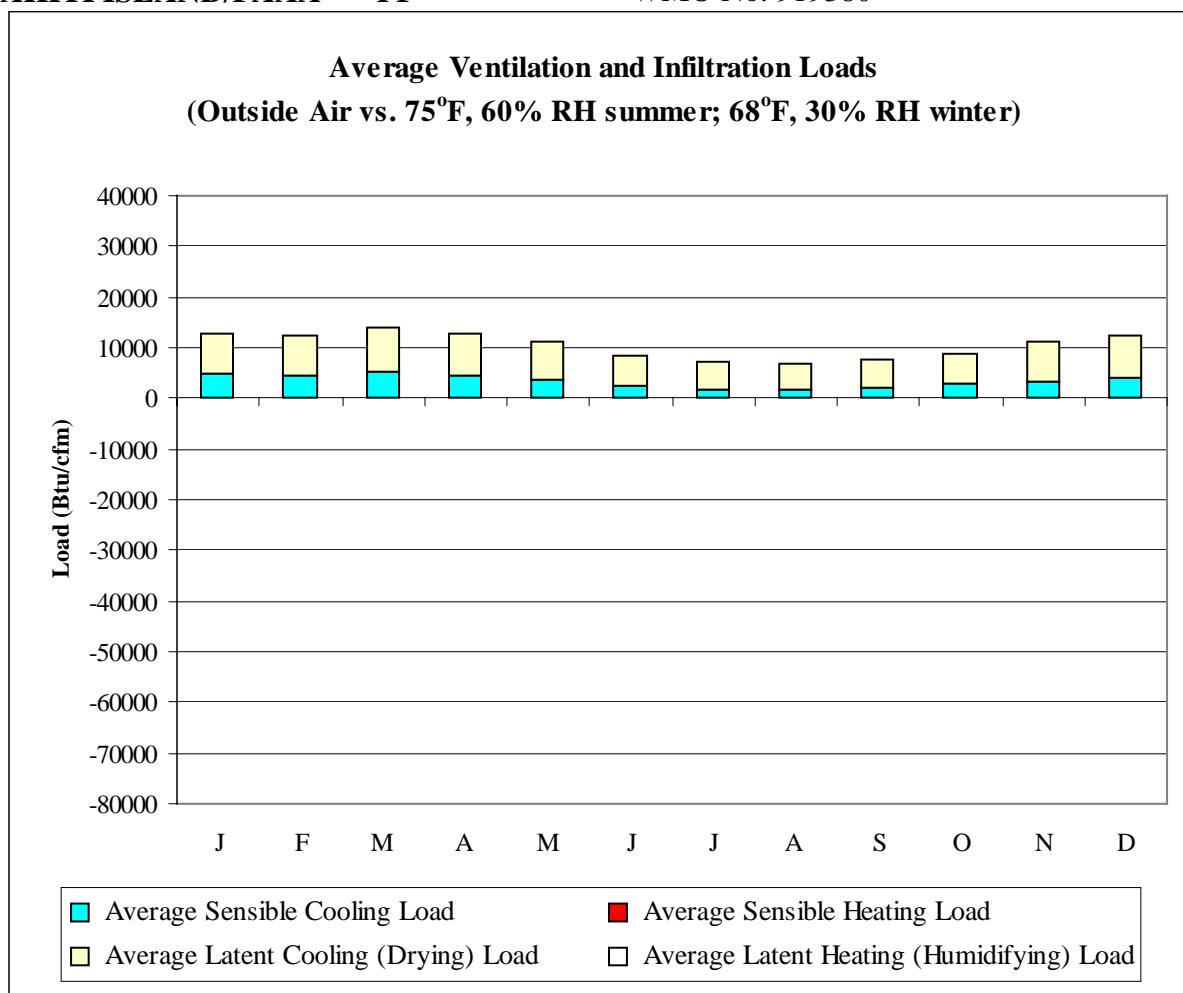
Degree Days, Heating and Cooling

(Base 65°F)



Mean Cooling Degree Days Mean Heating Degree Days

	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	488	0
FEB	451	0
MAR	509	0
APR	476	0
MAY	446	0
JUN	372	0
JUL	357	0
AUG	353	0
SEP	368	0
OCT	398	0
NOV	430	0
DEC	459	0
ANN	5108	0

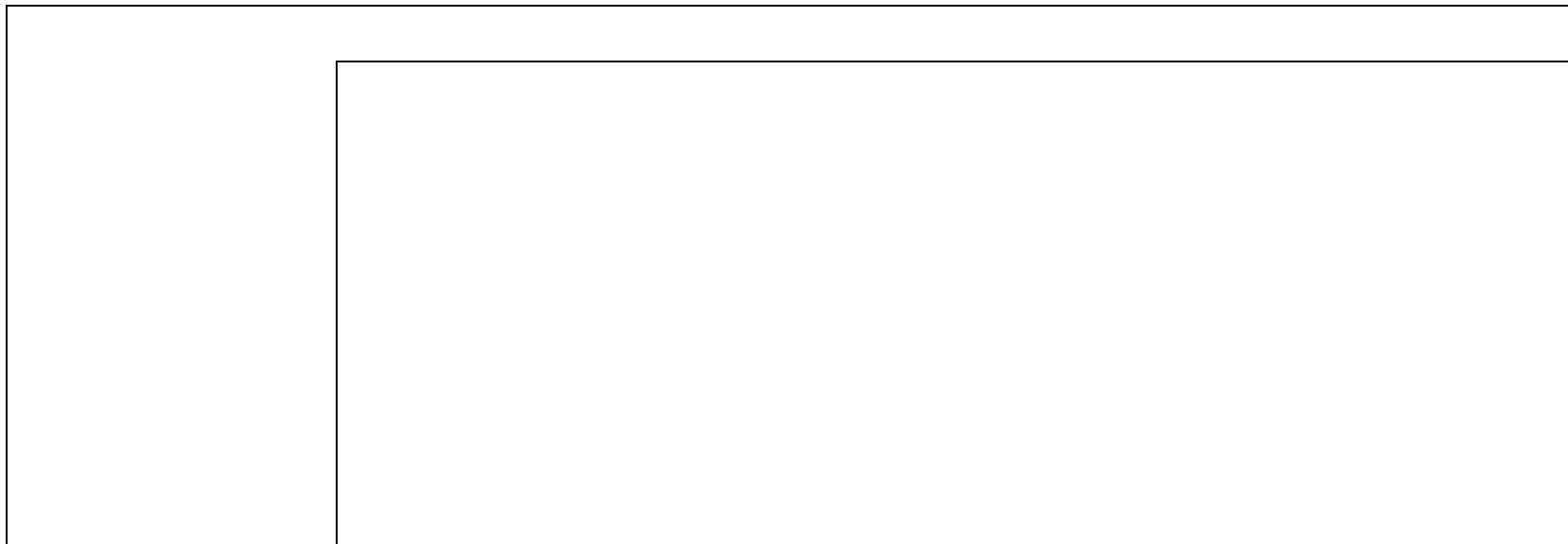


	Average Sensible Cooling Load	Average Sensible Heating Load	Average Latent Cooling Load	Average Latent Heating Load
	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)	(Btu/cfm)
JAN	4672	0	8271	0
FEB	4418	0	7813	0
MAR	5260	0	8758	0
APR	4667	0	8091	0
MAY	3781	0	7457	0
JUN	2342	-5	5941	0
JUL	1893	-9	5211	0
AUG	1721	-15	5037	0
SEP	2083	-5	5354	0
OCT	2713	-1	6136	0
NOV	3423	0	7661	0
DEC	3905	0	8535	0
ANN	40878	-35	84265	0

Average Annual Solar Radiation – Nearest Available Site

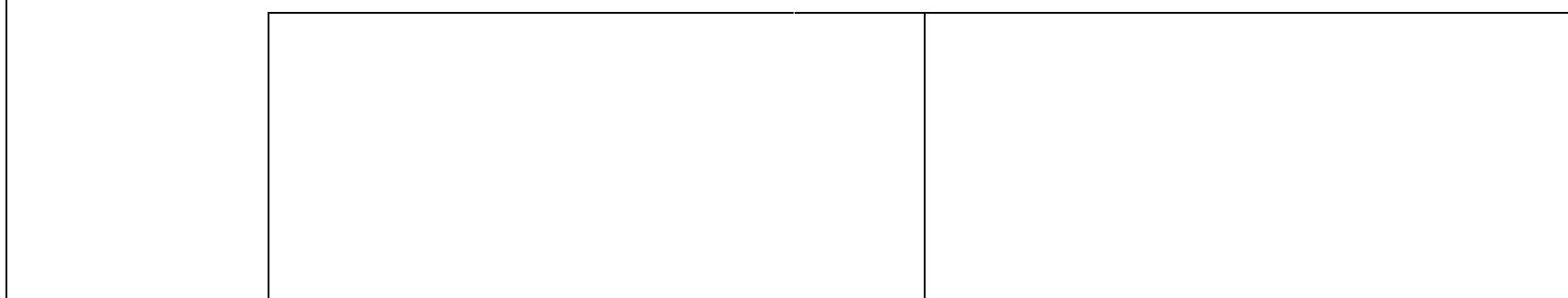
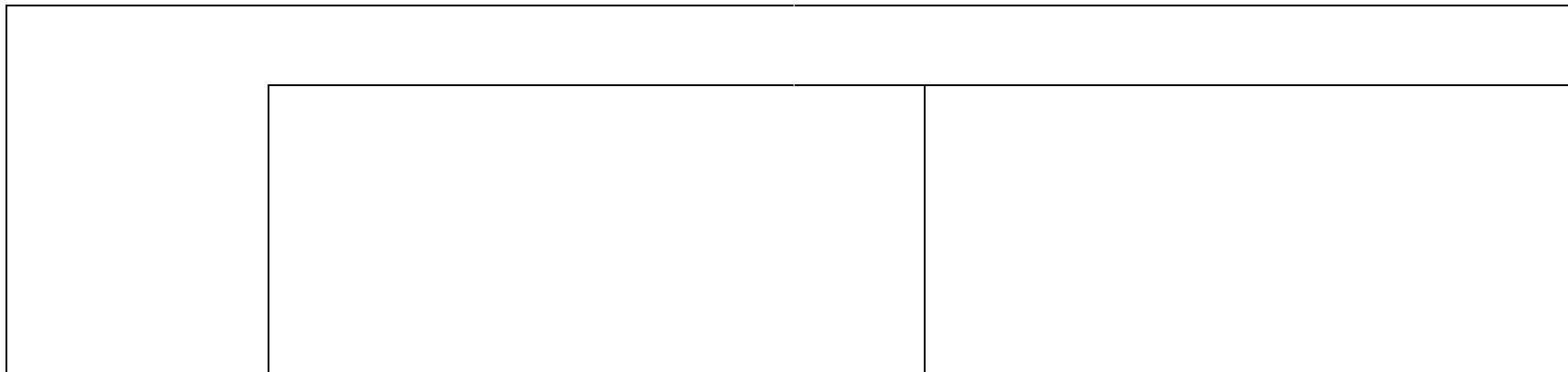
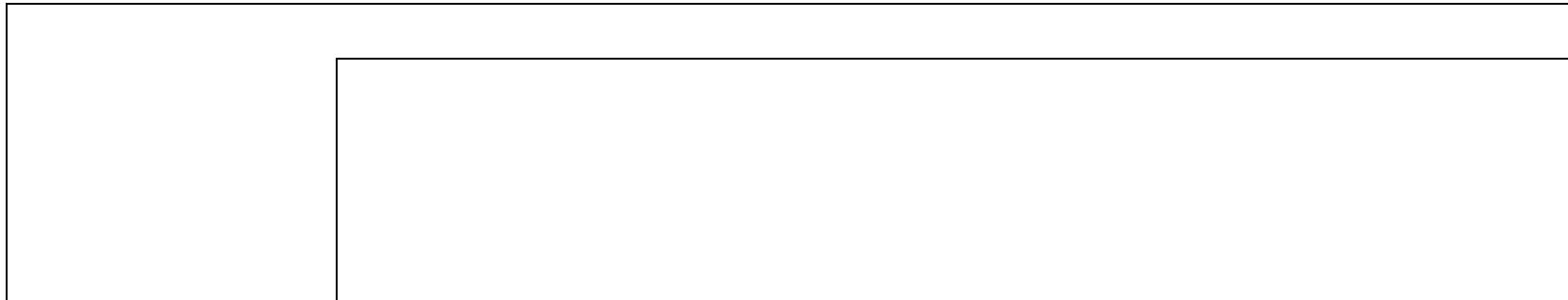
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

No Solar Radiation
Data Available



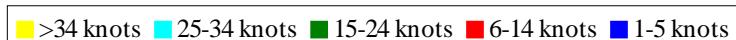
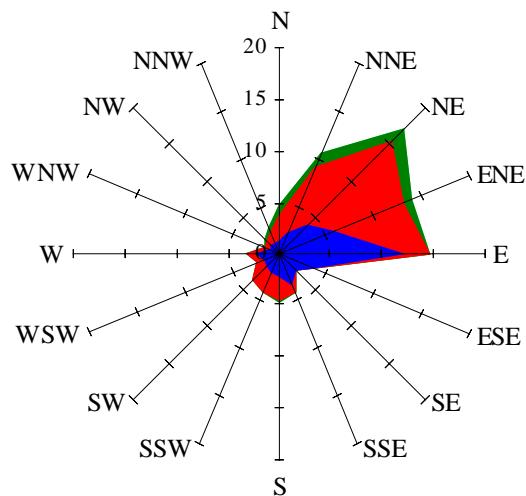
Average Annual Solar Heat and Illumination – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)



Wind Summary - December, January, and February

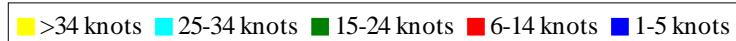
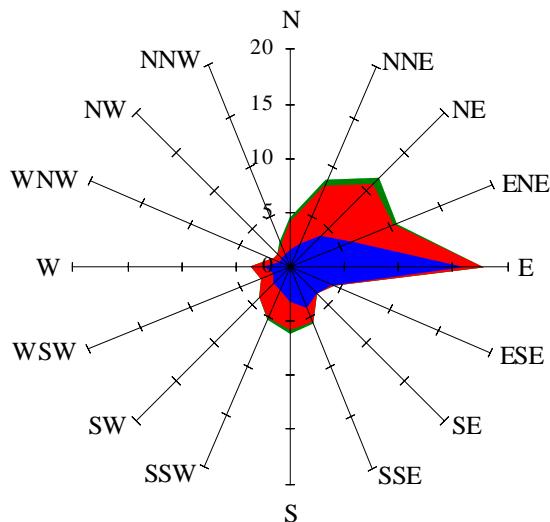
Labels of Percent Frequency on North Axis



Percent Calm = 5.36

Wind Summary - March, April, and May

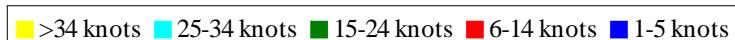
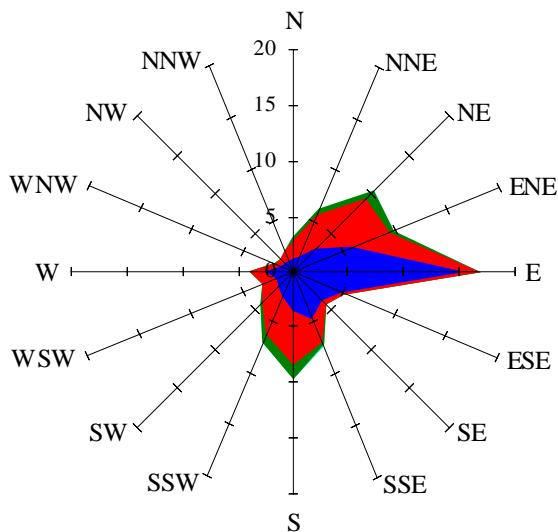
Labels of Percent Frequency on North Axis



Percent Calm = 7.64

Wind Summary - June, July, and August

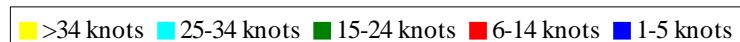
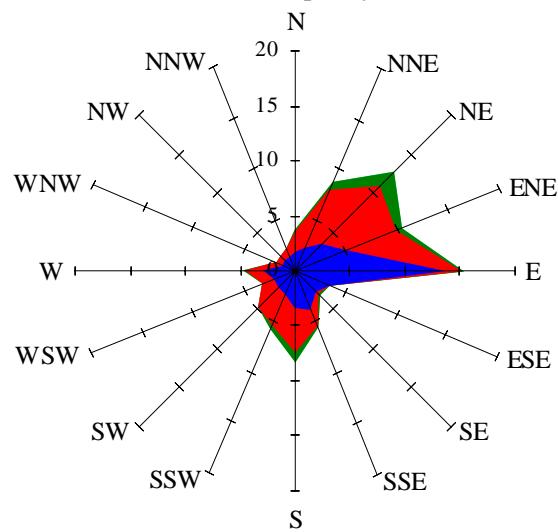
Labels of Percent Frequency on North Axis



Percent Calm = 5.49

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 5.72